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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/800,697   | 03/07/2001  | Prudence A. McIntosh | 705445US1RA7        | 4028             |
| 24938 7590 06/22/2009<br>DAIMLERCHRYSLER INTELLECTUAL CAPITAL CORPORATION<br>CIMS 483-02-19<br>800 CHRYSLER DR EAST<br>AUBURN HILLS, MI 48326-2757 |             |                      |                     |                  |
| EXAMINER   |             |                      |                     |                  |
| FRENEL, VANEL  |             |                      |                     |                  |
| ART UNIT   |             | PAPER NUMBER         |                     |                  |
| 3687   |             |                      |                     |                  |
| MAIL DATE  |             | DELIVERY MODE        |                     |                  |
| 06/22/2009   |             | PAPER                |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

1 UNITED STATES PATENT AND TRADEMARK OFFICE  
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4 BEFORE THE BOARD OF PATENT APPEALS  
5 AND INTERFERENCES  
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7

8 *Ex parte* PRUDENCE A. MCINTOSH, D. PAUL STANNARD, JOAN B.  
9 RABAUT, MICHAEL J. MAHONEY, and DANNY L. LAETHEM  
10  
11

12 Appeal 2009-003914  
13 Application 09/800,697  
14 Technology Center 3600  
15  
16

17 Decided:<sup>1</sup> June 22, 2009  
18  
19

20 Before HUBERT C. LORIN, ANTON W. FETTING, and  
21 BIBHU R. MOHANTY, *Administrative Patent Judges*.  
22

23 FETTING, *Administrative Patent Judge*.  
24  
25

26 DECISION ON APPEAL  
27

28 STATEMENT OF THE CASE  
  
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<sup>1</sup> The two month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

Prudence A. McIntosh, D. Paul Stannard, Joan B. Rabaut, Michael J. Mahoney, and Danny L. Laethem (Appellants) seek review under 35 U.S.C. § 134 of a non-final rejection of claims 1-20, the only claims pending in the application on appeal.

We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b) (2002).

We REVERSE.

The Appellants invented a computer-based vehicle warranty and repair expert system (Spec. 1:3-5).

An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below [bracketed matter and some paragraphing added].

1. A computer-implemented warranty knowledge base construction system, comprising:  
[1] a user interface for receiving a first rule related to vehicle repair claim processing;  
[2] a rules syntax data store that stores syntax rules for constructing repair claim-related rules;  
[3] a knowledge base generator module connected to the user interface and to the rules syntax data store for determining whether the first rule is in an acceptable syntax based upon the stored syntax rules;  
[4] wherein the first rule is used in a knowledge base system to process repair claims.

This appeal arises from the Examiner's Non-Final Rejection, mailed October 19, 2006. The Appellants filed an Appeal Brief in support of the appeal on March 8, 2007. An Examiner's Answer to the Appeal Brief was mailed on July 17, 2007. A Reply Brief was filed on September 13, 2007.

PRIOR ART

The Examiner relies upon the following prior art:

|             |                 |               |
|-------------|-----------------|---------------|
| Sampath     | US 6,892,317 B1 | May 10, 2005  |
| Abdel-Malek | US 6,959,235 B1 | Oct. 25, 2005 |

REJECTIONS

Claims 1-20 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Abdel-Malek and Sampath.

ISSUES

The issue pertinent to this appeal is whether the Appellants have sustained their burden of showing the Examiner erred in the rejection of claims 1-20 under 35 U.S.C. § 103(a) as unpatentable over Abdel-Malek and Sampath. The pertinent issue turns on whether Sampath describes a rules syntax data store that stores syntax rules for constructing repair claim-related rules and a knowledge base generator for determining whether rules are in acceptable syntax based on the syntax rules.

FACTS PERTINENT TO THE ISSUES

The following enumerated Findings of Fact (FF) are believed to be supported by a preponderance of the evidence.

*Abdel-Malek*

01. Abdel-Malek is directed to a method and system for receiving repair recommendations and related information from a central diagnostic and repair service (Abdel-Malek 1:9-12).
02. The method begins with a technician, with a portable unit, approaching a mobile asset that may require repairs. The portable

unit is capable of communication with a service center (Abdel-Malek 4:10-18).

03. The portable unit exchanges repair, maintenance, and diagnostic information with the service center, including parts information and warranty information (Abdel-Malek 4:24-30).

04. The technician has access to repair resources, repair manuals, field modification instructions, schematics, block diagrams, and special software tools related to the repair task (Abdel-Malek 5:1-6).

05. Additionally, repair experts at the service center can provide the technician with individualized assistance via the portable unit (Abdel-Malek 5:11-14). The repair experts analyze the information and produce a recommendation that is provided to the technician in a timely fashion so as to enhance the degree of accuracy in carrying out the repair procedure (Abdel-Malek 5:59-65). An expert repository stores the repair recommendations authored at the service center (Abdel-Malek 7:19-21).

06. An interface unit conditions data between the portable unit and various information sources (Abdel-Malek 7:6-18).

*Sampath*

07. Sampath is directed to an electronic system for failure prediction, diagnosis, and remediation of an electronic system (Sampath 1:10-13).

08. The monitored electronic system generates status information (Sampath 4:55-58). The status information is forwarded to the diagnostic server (Sampath 5:39-43), which then forwards the

status to the data acquisition circuit (Sampath 5:51-55). The data acquisition circuit further forwards the status to the database and to the prediction/diagnostics circuit (Sampath 5:55-58). The prediction/diagnostics circuit determines whether that electronic system has failed or is predicted to fail (Sampath 5:64-67). If a failure is detected or predicted, the repair planning circuit determines a corrective repair action (Sampath 6:5-7). During the diagnostic analysis, one or more secondary knowledge sources can be accessed to acquire additional information and/or expertise (Sampath 6:13-16).

09. The prediction/diagnostics circuit determines if the status information is "prediction" or diagnostic" information. Prediction information is defined as any status information which is pertinent to determining whether an action should be taken to avoid a particular impending outcome (Sampath 6:17-21). The prediction/diagnostic analysis can be done by a rule using parameters stored in the database. For example, for a threshold analysis, the threshold value, stored in a database, and a rule can be used to determine whether any value is in danger of crossing a threshold (Sampath 6:38-46).

10. The diagnostics and prognostics analysis involves a more detailed analysis and may include invocation of a reasoning algorithm or an expert system. The diagnosis analysis results are stored in a database (Sampath 10:16-25).

11. The system is preferably implemented on a single program general purpose computer or a separate programmed general

purpose computer (Sampath 12:53-67). The methods may be readily implemented as software or a routine embedded on a personal computer such as Java or CGI script (Sampath 13:19-33).

*Facts Related To The Level Of Skill In The Art*

12. Neither the Examiner nor the Appellants has addressed the level of ordinary skill in the pertinent art knowledge base system development. We will therefore consider the cited prior art as representative of the level of ordinary skill in the art. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (“[T]he absence of specific findings on the level of skill in the art does not give rise to reversible error ‘where the prior art itself reflects an appropriate level and a need for testimony is not shown’”) (quoting *Litton Indus. Prods., Inc. v. Solid State Sys. Corp.*, 755 F.2d 158, 163 (Fed. Cir. 1985)).

*Facts Related To Secondary Considerations*

13. There is no evidence on record of secondary considerations of non-obviousness for our consideration.

PRINCIPLES OF LAW

*Obviousness*

A claimed invention is unpatentable if the differences between it and the prior art are “such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art.” 35 U.S.C. § 103(a) (2000); *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007); *Graham v. John Deere Co.*, 383 U.S. 1, 13-14 (1966).

1 In *Graham*, the Court held that the obviousness analysis is bottomed  
2 on several basic factual inquiries: “[1] the scope and content of the prior art  
3 are to be determined; [(2)] differences between the prior art and the claims at  
4 issue are to be ascertained; and [(3)] the level of ordinary skill in the  
5 pertinent art resolved.” 383 U.S. at 17. See also *KSR*, 550 U.S. at 406.  
6 “The combination of familiar elements according to known methods is likely  
7 to be obvious when it does no more than yield predictable results.” *Id.* at  
8 416.

9 “When a work is available in one field of endeavor, design incentives  
10 and other market forces can prompt variations of it, either in the same field  
11 or a different one. If a person of ordinary skill can implement a predictable  
12 variation, § 103 likely bars its patentability.” *Id.* at 417.

13 “For the same reason, if a technique has been used to improve one  
14 device, and a person of ordinary skill in the art would recognize that it would  
15 improve similar devices in the same way, using the technique is obvious  
16 unless its actual application is beyond his or her skill.” *Id.*

17 “Under the correct analysis, any need or problem known in the field  
18 of endeavor at the time of invention and addressed by the patent can provide  
19 a reason for combining the elements in the manner claimed.” *Id.* at 420.

## 20 21 ANALYSIS

22 *Claims 1-20 rejected under 35 U.S.C. § 103(a) as unpatentable over*  
23 *Abdel-Malek and Sampath*

24 The Appellants argue these claims as a group.

25 Accordingly, we select claim 1 as representative of the group.  
26 37 C.F.R. § 41.37(c)(1)(vii) (2008).



1           The Examiner found that Abdel-Malek describes limitations [1] and  
2 [4] of claim 1, but fails to describe limitations [2] and [3] (Ans. 3-4). The  
3 Examiner found that Sampath describes limitations [2] and [3] (Ans. 4). The  
4 Examiner further found that a person with ordinary skill in the art would  
5 have recognized the benefits of the ease of use, productivity gains, and cost  
6 savings by making the claim rules and syntax readily available, as described  
7 by Sampath, and a person with ordinary skill in the art would have found it  
8 obvious to combine Abdel-Malek and Sampath (Ans. 4).

9           The Appellants contend that Sampath fails to describe a rule syntax  
10 data store for storing syntax rules and a knowledge base generator that  
11 determines whether the first rule is in acceptable syntax as required by claim  
12 1, limitations [2] and [3] respectively (Br. 12-13 and Reply Br. 4-5).

13           The Examiner has relied on Sampath to describe syntax rules in the  
14 rejection of claim 1 (Ans. 4). The Examiner argued in response that no  
15 special definition for the term “syntax rules” has been provided in the  
16 Specification and that the definition for syntax in programming languages is  
17 that which controls rules as to structure and content of statements (Ans. 9).  
18 The Examiner further argued that Sampath describes that its system can be  
19 implemented using software and as such the programming language used in  
20 programming the software relies on syntax rules (Ans. 10).

21           We agree with the Appellants. Claim 1 recites the use of syntax rules  
22 for constructing repair-related claims. The Examiner and the Appellants  
23 agree that the plain meaning of the term “syntax rules” is the rules that  
24 govern the formation of statements (Reply Br. 4 and Ans. 9). As such, the  
25 construction of limitation [2] in light of the plain meaning of syntax rules  
26 requires that there exist a set of rules that govern the formation of

1 constructing claim-related rules. The syntax rules used in a programming  
2 language govern the construction of statements used in that programming  
3 language. However, those syntax rules are not used to govern the  
4 construction of claim-related rules. We find no evidence that Sampath  
5 describes using the syntax rules of a programming language towards  
6 constructing claim-related rules. The Examiner has not provided any  
7 evidence that either reference even stores claim-related rules as data apart  
8 from the program executing the procedure itself. The syntax checking the  
9 Examiner refers to in programming languages is not applied to the data at  
10 run time, and only occurs when the program is compiled, not at run time.  
11 But most critically, the claim specifically requires that the rules be in the  
12 form of data that are checked for syntax, and the Examiner has not shown  
13 that either reference provides such. At best, the references describe storing  
14 parameters that might be used in rules (FF 09), but with no evidence that  
15 syntax checking would occur on the rules that might be used with those  
16 parameters.

17 As such, Sampath does not describe a rule syntax data store for  
18 storing syntax rules and a knowledge base generator that determines whether  
19 the first rule is acceptable syntax as required by claim 1. Claim 11, the only  
20 other independent claim, has similar limitations, and its rejection is similarly  
21 in error. Since this issue is dispositive as to the rejections against claims 1-  
22 20, we need not reach the remaining arguments raised by the Appellants  
23 against these rejections.

24 The Appellants have sustained their burden of showing that the  
25 Examiner erred in rejecting claims 1-20 under 35 U.S.C. § 103(a) as  
26 unpatentable over Abdel-Malek and Sampath.

CONCLUSIONS OF LAW

The Appellants have sustained their burden of showing that the Examiner erred in rejecting claims 1-20 under 35 U.S.C. § 103(a) as unpatentable over Abdel-Malek and Sampath.

DECISION

To summarize, our decision is as follows:

- The rejection of claims 1-20 under 35 U.S.C. § 103(a) as unpatentable over Abdel-Malek and Sampath is not sustained.

REVERSED

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